

PART TWO

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UTAH—LAND OF NATURAL

Diversity

Dry deserts, mountains and wetlands

MOUNTAINS: Utah's mountains rise dramatically above its desert landscape. Even though Utah is the second driest state in the nation, its mountains capture enough moisture to support an incredible diversity of plants and animals. As easterly moving clouds are pushed upwards along the rising mountain flanks they cool, losing their ability to hold water, which falls as rain and snow. Up to 40 inches of precipitation can fall on some of Utah's mountain ranges in a year. A climb of 1,000 feet in elevation in the mountains is equivalent to traveling north a distance of 600 miles. Hiking from the base of a mountain in Utah is like journeying from the desert region north through the forests found in northern Idaho and Canada to a landscape that is similar to the Arctic tundra.

Different elevation ranges supporting specific plant associations are called life zones. Moving up a

mountain, the life zones traversed in order are the transition (foothills), Canadian (montane), Hudsonian (subalpine) and alpine life zones. The different zones are not always distinct, and in most places they grade

into one another. Certain species of wildlife are distinctly associated with some particular life zones whereas others can be found in all life zones.

The Transition life zone ranges between 5,500 to 8,000 feet. The most common plant communities at this elevation in Utah are pinyon-juniper woodlands and oak-maple shrublands. Pinyon-juniper woodlands, often referred to as "pygmy" forests, cover 9 million acres in Utah. A few of the animals living within this zone are the scrub jay, deer mouse, tree lizard, spotted towhee and Virginia's warbler.

The Canadian life zone spans elevations of 8,000 to 9,500 feet. Forests dominated by lodgepole pine, ponderosa pine, aspen or Douglas fir can be found at this elevation in Utah's mountains. The dominant plant community that exists is dictated by slope orientation, soil type and soil moisture. Residents of this zone include the mountain bluebird, white-breasted nuthatch, tiger salamander, mule deer, black bear, short-horned lizard



Utah's high mountains capture precipitation for an otherwise dry state.

UTAH'S WILD NOTEBOOK



and porcupine.

The Hudsonian life zone, found between 9,500 feet and tree line, is characterized by the tangled spruce-fir forest community. Dominant tree species in this zone are Englemann spruce and subalpine fir. The climate is cold, windy and moist with most of the precipitation falling as snow.

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This snow remains well into summer and results in a frost-free season of only two months. Wildlife found within this zone includes the mountain chickadee, gray jay, Clark's nutcracker, marten, long-tailed weasel, and snowshoe hare.

The Alpine zone, existing above 11,200 to 12,000 feet depending on latitude, is shaped by wind and cold. Intense winds, average annual temperatures below freezing and limited available moisture create a treeless, barren looking landscape. A closer look reveals an abundance of low, slow-growing perennial cushion-like plants with flowering parts and leaves covered by protective coatings or fine hairs to reduce loss of water. The alpine zone, which exists in the Uinta Mountains in Utah, supports species such as the rosy finch, elk, montane vole, yellow-bellied marmot and pika. 🐹

A cold, moist, windy climate characterizes the higher elevations of Utah's mountains.